

## MCG 8100 Tank Monitor

### A Convenient, Powerful Remote Monitor

The MCG 8100 communicates and provides power to any of the L&J 81xx series magnetostrictive sensors or leak detection probes through a convenient 4 wire data highway. Up to 10 individual probes and 12 external sensors can be connected in parallel to the same MCG 8100, with the appropriate amount of I.S. barriers.

Through this data highway, the MCG 8100 can be used for product level, water level and product temperature in the tanks. Hydrocarbon sensors are also constantly checked by the unit for liquids or vapors. The unit's 20 digit keypad, 4 line LCD display, and self-prompting menus make the MCG 8100 easy to program and operate for even the most inexperienced users.

### Flexible Reports and Alarms

Inventory reports can be generated automatically, up to six times a day, when programmed into the system. Four programmable discrete alarm contact outputs are provided. These contacts can be used in conjunction with alarm horns or lights to inform operators of alarm conditions. A built in buzzer is activated on any alarm. The buzzer and contacts remain activated until acknowledged even if the alarm condition clears.

### Computerized "Super Smart" Technology

The MCG 8100 is a product that takes advantage of the latest advances in large scale integration (LSI), and high density surface mount technology. The unit includes up to 256K RAM and ROM, two serial ports, one parallel port, and multiple DMA channels and clock timers. Together these features offer the processing power of a full-sized computer in a small, easy to install panel or wall mount package.

In addition to providing complete on-site monitoring and inventory control the MCG 8100 can optionally be configured with an RS-232 communication port to provide local information to your central computer system, providing for complete monitoring of all your sites from a central location.



## Features

- Meets States EPA Requirements For Underground Storage Tanks
- Tank Level and Leak Detection Monitoring
- Extremely Accurate Microprocessor Based System
- Approved for Leak Detection in Tanks up to 150,000 Gallons
- Reliable Remote Communication Through RS232 Port

## Applications

Product Level	Average Temperature	Water Level
Density	Vapor Detection	Gross Volume
Liquid Detection	Net Volume	Interstitial
Wet Well	Dry Well	

Remote communication to other systems

**Specifications:**

**Operating Principle:**

Microprocessor Based

**Communication:**

L&J Tankway to 81XX series sensors and probes

**Resolution Level:**

.001 inch

**Temperature:**

.01°F

**Remote Communications:**

RS-232 Port

**Printer:**

24 Column Impact

**Alarms:**

High/Low Product, High Water, Vapor Detection, Liquid Detection

**Display:**

4 Line LCD, 80 Character

**Printed Reports:**

Inventory, Delivery, Alarm Conditions, Night Movements, Auto Leak Test

**Leak Detection Rate:**

0.1 Gallons/hour

**Enclosure Size:**

12-1/4" H x 9-1/2"W x 5-1/4"L

**Battery Back-up:**

12 V Gell Cell (8 hr. duration)

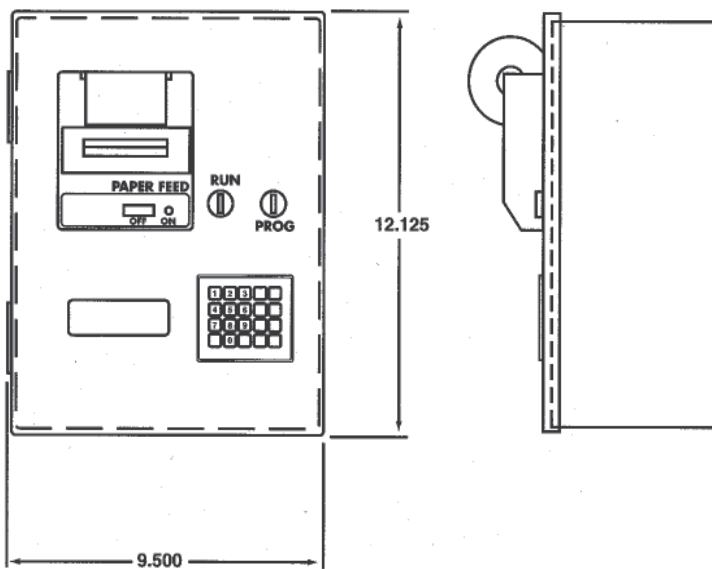
**Approvals:**

UL Listed, Third Party EPA certified

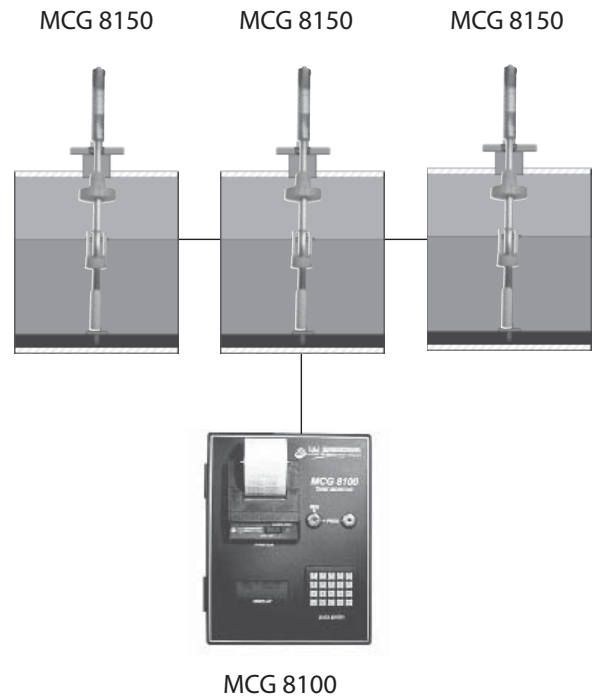
**Regulatory:**

Meets EPA UST Leak Detection Requirements

**Dimensions**



**Typical System Layout**



All designs subject to change. Certified dimensions and specifications available upon request.

## MCG 8100 Ordering Guide

### MCG 8100 Tank Monitor

Includes: Tank Inventory, Interstitial Leak Sensing\*, Delivery Reports, Alarm Reports, Night Monitor Reports and Close Out. Alarm Relay with two (2) dry contacts.

\* Sensors not included; must be ordered separately

### Model Number Selection:

The model number will consist of a base number **MCG 8100** followed by 10 digits. These digits will represent 6 sets of option tables:

### MCG 8100 - AB - CD - EF - GH - IJ

AB - Level Probe and Leak Test	
00	Direct Digital Probe .2 GPH Leak Test
10	Magnetostrictive Probe .2 GPH Leak Test
11	Magnetostrictive Probe .1 GPH Leak Test
12	Magnetostrictive Probe with Pressure Transducer
13	Magnetostrictive Probe with Pressure Transducer (with leak detect) (Up to 15,000 Gal Tank .2 GPH Leak Detection)
14	Magnetostrictive Probe with Pressure Transducer (with leak detect) (Up to 150,000 Gal Tank .2 GPH Leak Detection)
20	Magnetostrictive Probe for Tanker Trucks
50	No Level, Interstitial Only

CD - Monitoring Capabilities*	
00	Level, BS&W & Interstitial
01	Level, Interstitial & Vapor
02	Level, Temperature & Net Volume with Density
10	Level, Interstitial & Ground Water
11	Level, Interstitial, Ground Water & Vapor
20	Level, BS&W & Temp
99	Ground Water & Vapor Only

\*Sensors not included; must be ordered separately.

E - Printer	
0	With Printer
1	No Printer

F - Printer / Number of I.S. Barriers*	
0	0 Barrier
1	1 Barrier**
2	2 Barriers**
3	3 Barriers**
4	4 Barriers**
5	5 Barriers**
6	6 Barriers**

\*If additional barriers required, consult factory.

\*\* Each barrier supports up to (5) 81XX probes with level, BS&W, & temp only

GH - Power Input / Relays*	
00	120VAC, 2 Dry Contacts Out
01	120VAC, 4 Dry Contacts Out
02	120VAC, 5 Dry Contacts Out
10	220VAC, 2 Dry Contacts Out
11	220VAC, 4 Dry Contacts Out
12	220VAC, 5 Dry Contacts Out
20	12VDC, 2 Dry Contacts Out
21	24VDC, 2 Dry Contacts Out

\*If additional contacts required, consult factory.

IJ - Readout	
00	English Readout, No Remote Capability
01	English Readout, With Remote Capability
02	English Readout, RS-232 to MCG 3900 Communication
10	Metric Readout, No Remote Capability
11	Metric Readout, With Remote Capability